

**UNITED STATES DEPARTMENT OF COMMERCE****Pat nt and Trademark Office**

Addr ss: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

11

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/487,558	01/19/00	BUSBY	R 109272.130

HM22/1215

Wayne A. Keown, Ph.D.
Hale and Dorr LLP
60 State Street
Boston MA 02109

EXAMINER
DAVIS, K

ART UNIT	PAPER NUMBER
1636	

DATE MAILED:

12/15/00

Pleas find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/487,558

Applicant(s)

BUSBY ET AL.

Examiner

Katharine F. Davis

Art Unit

1636

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 January 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-103 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claims 1-103 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

Attachment(s)

- 15) ☐ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 18) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other:

DETAILED ACTION

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-14, 102 and 103 drawn to a method for improving the production of a secondary metabolite by a fungus by increasing the yield of the secondary metabolite in the fungus, classified in Class 435, subclass 455.
- II. Claims 15-28, 102 and 103 drawn to a method for improving the production of a secondary metabolite by a fungus by increasing productivity of the secondary metabolite in the fungus, classified in Class 435, subclass 455.
- III. Claims 29-42, 102 and 103 drawn to a method for improving the production of a secondary metabolite by a fungus by increasing efflux or excretion of the secondary metabolite in the fungus, classified in Class 435, subclass 455.
- IV. Claims 43-56, 102 and 103 drawn to a method for improving the production of a secondary metabolite by a fungus by decreasing production of side products or competing secondary metabolites, classified in Class 435, subclass 455.
- V. Claims 57-73, 102 and 103 drawn to a method for improving the production of a secondary metabolite by a fungus by altering the characteristics of the fungus in a manner that is beneficial to the production of the secondary metabolite, classified in Class 435, subclass 455.

- VI. Claims 74-87, 102 and 103 drawn to a method for improving the production of a secondary metabolite by a fungus by causing conditional lysis of the fungus, classified in Class 435, subclass 455.
- VII. Claims 88-103, drawn to a method for improving the production of a secondary metabolite by a fungus by increasing the resistance of the fungus to the deleterious effects of exposure to the secondary metabolite, classified in Class 435, subclass 455.

The inventions are distinct, each from the other because of the following reasons:

Inventions I-VII are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case each of the inventions involves genetic modification of a fungus to effect the secondary metabolite production of the fungus, however each of the inventions employs different steps in the modification process to effect different genes. Therefore, each invention has a distinct effect on the fungus and each can be practiced separately.

Art Unit: 1636

Additionally, Groups I-VII are separate and distinct as they require materially different searches and consideration of molecular methods based on the separate modification steps and genes involved in each invention.

Because the inventions of Groups I-VII are distinct for the reasons discussed above, restriction for examination purposes as indicated is proper.

A telephone call was made to Colleen Superko on December 13, 2000 to request an oral election to the above restriction requirement, but did not result in an election being made.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

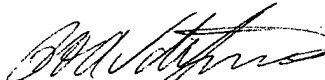
Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Katharine F. Davis whose telephone number is (703) 605-1195. The examiner can normally be reached on Monday-Friday (8:30am-5:00pm). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Schwartz can be

Art Unit: 1636

reached on (703) 308-1133. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-4242 for regular communications and (703) 305-1935 for After Final communications. Any inquiry concerning the formalities of this application should be directed to Patent Analyst Dianiece Jacobs whose telephone number is (703) 305-3388. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0196.

Katharine F. Davis/KFD
December 14, 2000



ROBERT A. SCHWARTZMAN
PRIMARY EXAMINER